Introduction of Hengli Refinery
Contents

ABOUT US
Part 01

OUR BUSINESS
Part 02

EQUIPMENT
Part 03

ADVANTAGES
Part 04
Part 01

ABOUT US

1. Company Profile
2. President's Speech
3. Our History
4. Our Culture
Hengli Group, founded in 1994, is an international enterprise with petrol-chemical, polyester advanced materials, weaving as its main business, the diversified development of thermal power, finance, hotel and real estate.

Hengli Petrochemical (Dalian) Refinery Co., Ltd. is founded in Changxing island in Dalian which is one of the seven petrochemical industry base for the 20 million tons per year refining-chemical integration project invested by Hengli Group in December 2015, total amounts up to 5620 million RMB, is the first major refining-chemical project opened by government to private enterprise, ranking No.1 in many respects among peer.
President Chen Jianhua's Speech

Since Hengli Group Co., Ltd has been set up in 1994, under the guidance of Hengli’s era viewpoint spirit “Do As The Time”, the industrial chain has been constantly extended, transformation and upgrade has been continuously advanced, and brilliant achievements have been obtained in many industries such as petro-chemical, polyester, chemical fiber, textile, thermal power, real estate, and hotel, etc.

In the era of economic globalization, we will be adhering to the enterprise tradition of “Unity and Struggle”, accumulate richly and break forth vastly, and create greater glories, to meet the challenges with profession, create the future with reputation, and realize sound and rapid enterprise development.

“With Constant Will and Lasting Efforts, Super Quality Will Dominate The World”. We will be looking forward to carrying out multiple forms of economic cooperation with all friends. We will also return you with more high-quality service for your support and favor for a long time. Let’s advance hand in hand, and share the happiness of success.
Our History

2010.4
Hengli Petrochemical (Dalian Changxing Island) Industrial Park laid a foundation, Hengli Group took the first step into petrochemical industry.

2012.9
The first phase of PTA project was put into operation.

2015.2
The second phase of PTA project achieved success at the first feeding, which meant an auspicious start in the new year.

2015.12
Hengli launched the 20 million tons per year refining-chemical integration project.

2016.9
Supporting 5000-ton-level liquid chemical wharf of Hengli Petrochemical (Dalian) Refinery Co., Ltd. was completed and accepted.

2018.3
20 million tons per year refining-chemical integration project entered into the phrase of fully installment of equipment.
Our History

Group's Sales Amount

- over 1.66 billion in 2008
- over 5.2 billion in 2011
- over 16.3 billion in 2014
- over 30.79 in 2017

Ranking No.1 in many respects among peer

The first enterprise adopted fluidized bed hydrogenation
It owns the biggest ethylene cracking plant (0.15 million tons per year)
It owns the biggest aromatic combination plant (0.45 million tons per year)

Lu Weisheng, deputy director of National Development and Reform Commission investigated Hengli Refinery
Zhang Lei, member of the standing committee of Liaoning province, executive vice governor investigated Hengli Refinery
Xia Deren, president of CPPCC of Liaoning province investigated Hengli Refinery
Company Culture

01. Grasp the opportunity
Always to be the first
Advance with the times

02. Scientific decision-making
Efficiency and pragmatism
Be brave to shoulder the responsibility

03. Unite and strive
Innovation and development
Advance-harmony
Part 02

Our Business

1. Equipment & technology
2. Production
3. Distribution of business
Hengli 20 million tons per year refining-chemical integration project has adopted advanced technology and processing, the main patent technology is provided by AXENS, Topsoe, Chevron, Lummus, SSR (3 d), GTC, Shanghai courtyard of Sinopec, LUMMUS and GRACE UNIPOL. Main patent technology of Fluidized bed technology is provided by SW, Bager, SD, BASSEL, JPP and ST. We select the top design company to meet high standard of reliability and a long-term operation. We look around the whole world for the bidding for equipment and its procurement, select top manufacturers at home and abroad. Large equipment, key units, pumps, valves are all world-class products. Pipes, flanges, welding rods and gaskets are all purchased as the best products from the domestic market at the highest standard. Top construction team and capacity for building guarantees the safety and environmental protection of equipment.
Production

Composed by 6 sectors:

1. REFINING
- 10 million tons/year atmospheric and vacuum distillation equipment
- 2.2 million tons/year light hydrocarbon recycle equipment
- 2 million tons/year aviation coal hydrogenation equipment
- 3 million tons/year Diesel hydrogenation refining equipment
- 3.8 million tons/year Wax oil hydrocracking equipment
- 0.6 million tons/year lube oil hydrogenation heterogeneous dewaxing equipment
- 3.2 million tons/year residue fluidized bed hydrocracking

2. AROMATIC HYDROCARBON
- 4 million tons/year naphtha hydrogenation equipment
- 3.2 million tons/year Catalytic Reforming equipment
- 170,000 cubic/hour reforming hydrogen
- PSA equipment
- 200,000 cubic/hour refinery gas hydrogen SA equipment
- 2.25 million tons/year aromatic hydrocarbon equipment

3. CHEMICAL
- 1.7 MT/year C5/C6 heterogeneous separation equipment
- 1.3 MT/year C3/C4 dehydrogenation equipment
- 820KT/year MTBE equipment
- 300KT/year alklylation equipment
- 450KT/year polypropylene equipment

4. COAL HYDROGEN AND ACETIC
- 500 K standard cubic meter/hour coal hydrogen equipment
- 350 KT/year acetic acid equipment
- 500 KT/year methanol equipment

5. ETHYLENE ENGINEERING
- 1.50 MT/year ethylene cracking unit
- 900 KT/year Ethylene glycol Unit
- 400 KT tons/year HDPE equipment
- 720 KT/year Styrene equipment
- 20 0KT/year Polypropylene equipment
- 140 KT/year Butadiene Extraction equipment
- 350 KT/year Pyrolysis gasoline hydrogenation equipment

6. AUXILIARY
- Storage tank area
- Thermal power plant
- Sewage treatment plant
- Sea water desalination
- Dock (berth)
Distribution of business

**Petrochemical**
- Hengli Petrochemical (Dalian) Co., Ltd
- Hengli Petrochemical (Dalian) Refinery Co., Ltd
- Hengli Petrochemical (Dalian) Chemical Co., Ltd

**Polyester & Advanced Material**
- Jiangsu Hengli Chemical Fiber Co., Ltd
- Jiangsu Deli Chemical Fiber Co., Ltd
- Jiangsu Hengke Advanced Material Co., Ltd
- Yingkou Kanghui Petrochemical Co., Ltd

**Textile**
- Wujiang Chemical Fiber Weaving Factory Co., Ltd
- Jiangsu Boyada Textile Co., Ltd
- Jiangsu Deshun Textile Co., Ltd
- Jiangsu Dehua Textile Co., Ltd

**Thermal Power**
- Suzhou Susheng Thermal Power Co., Ltd
- Hengli Petrochemical Thermal Power Factory

**Real Estate**
- Hengli Real Estate (Dalian) Co., Ltd
- Suzhou Hengli Real Estate Co., Ltd
- Wujiang Hengli Real Estate Co., Ltd

**Hotel**
- Wujiang Tongli Lake Resort Co., Ltd
- Hengli International Hotel Co., Ltd
Hengli group continuously focuses on export brand building, and the import and export industries have for the most part thrived. The chemical fiber of high-end differentiation, new materials of weaving, high-end weaving machineries and fabrics are exported to more than 80 countries and regions, which has established good image of “Thrive with high quality and lead with advanced technology.”

Exporting countries's number has been more than: 80
Part 03

Introduction of equipment

1. Refining unit
2. Aromatic hydrocarbon unit
3. Cool to Hydrogen plant
4. Petrochemical unit
5. Ethylene project
Refining unit

20 million tons/year oil refining is composed of two series, which is based on high-sulfur crude oil, heavy crude and high-acid crude oil. Our designed oil are Arab medium (30%), Arab heavy (60%) and marine crude (10%) with 2.68% average sulfur content, 27.62 average API and 0.35 average acid value; We adopt hydrogenation technology in the whole process and make middle and heavy intermediate material cracked with atmospheric and vacuum distillation-residue hydrocracking as its mainline, which can provide not only high quality raw materials of light and heavy naphtha for downstream chemical equipment, but also high-quality petroleum products for the market.

main unit

- 10 million tons/year*2 atmospheric and vacuum distillation equipment
- 2.2 million tons/year*2 light hydrocarbon recycle equipment (contains product refinement and gas fractionation)
- 2 million tons/year aviation coal hydrogenation equipment
- 3 million tons/year*2 Diesel hydrogenation refining equipment
- 3.8 million tons/year*2 Wax oil hydrocracking equipment
- 0.6 million tons/year lube oil hydrogenation heterogeneous dewaxing equipment
- 3.2 million tons/year*2 residue fluidized bed hydrocracking
- 1.35 million tons/year solvent deasphalting.
- 130,000 tons/year x 5 sulfur recovery.
- 140t/h acid water stripping (non-hydrogenation series)
- 220t/h *2 acidic water stripping (hydrogenation series)
- 800t/h *3 solvent regeneration.
- 400t/h *2 solvent regeneration (sulfur matching.)
Aromatic plate 4.5 million tons/year PX is mainly composed of three sets of recovery units (3.2 million tons/year (3) and two sets of PX units (2.25 million tons/year (2), mainly patent technology is provided by the French Axens, which will be the largest aromatics hydrocarbon unit in China after going into operation. And it will provide raw material for 6.6 million tons/year PTA and help Hengli perfect aromatic hydrocarbon industrial chain.

Increase our voice in industry

Main equipment

- 1.4 million tons/year naphtha hydrotreating unit
- 3.2 million tons/year * 3 catalytic reforming device.
- 170 thousand cubic/hour * 3 reforming hydrogen PSA device.
- 200 thousand cubic/hour refinery gas hydrogen PSA device.
- 2.25 million tons/year * 2 aromatics devices.
Cool to hydrogen plant

Main Unit:
500,000 standard cubic meters/hour cool to hydrogen plant
350,000 tons/year acetic acid unit.
500,000 tons/year methanol unit.

providing lowest-cost 0.5 million standard cubic feet hydrogen per hour for the refining hydrotreating unit
**Chemical units**

**Main Equipment**

- 1.7 million tons/year C5 / C6 isomerization separation unit
- 1.3 million tons/year C3/IC4 deoxidization unit
- 820000 tons/year MTBE unit
- 300000 tons/year alkylation unit
- 450000 tons/year polypropylene unit
Ethylene project

Ethylene project is mainly composed of 1.5 million tons/year ethylene cracking unit, 0.9 million tons/year*2 ethylene glycol unit, 0.4 million tons/year high density polyethylene unit, 0.2 million tons/year polypropylene unit, 0.14 million tons/year butadiene extraction unit and 0.35 million tons/year gasoline hydrotreating unit, main patent technology is provided by SW, Bager, SD, BASSEL, JPP and ST. With light and normal raw material, the recovery rate of ethylene can reaches to 48% according to the concept of short process and large scale, which will be the largest ethylene unit in China after going into operation.
Our Advantages

**Power Supply**
We have our own coal-fire power plant, which is the only one receives approval among such projects.

**Environmental Protection**
Public project as desalination, air separation plant and air compression plant. We adopt highest standard of sewage treatment and reclaimed water reuse technology of French DEGREMONT.

**Storage & Transportation**
Crude oil tank farm, Refined oil tank farm, intermediate tank farm. Adopting advanced VOC technology for a cleaner production.

**Wharf**
0.3 million tons crude oil berth *2
Refined oil and chemical berth*6

**Policy Support**
1. The first major project opened by government to private enterprise
2. Major project for rejuvenating northeast China and other old industrial bases
3. NO.1 Project of Liaoning province
Our Partners

Hengli of China  Hengli of the World

Hengli Share: 600346
CONTACT INFO

Email: liuqianhan@hengli.com
Web: www.henglipc.com

ADDRESS

199#Zhizhuang Road Nanma
Economic Development Zone
Shengze Suzhou Jiangsu China

TELEPHONE

137 7166 3565
Thanks